## **AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

## **Claims**

1. (Currently Amended) Compound of formula (A):

$$R_{1}$$
 $R_{2}$ 
 $R_{1}$ 
 $R_{2}$ 
 $R_{1}$ 
 $R_{2}$ 
 $R_{1}$ 
 $R_{2}$ 
 $R_{1}$ 
 $R_{2}$ 
 $R_{1}$ 
 $R_{2}$ 
 $R_{3}$ 
 $R_{4}$ 
 $R_{5}$ 
 $R_{1}$ 
 $R_{2}$ 
 $R_{1}$ 
 $R_{2}$ 
 $R_{3}$ 
 $R_{4}$ 
 $R_{5}$ 
 $R_{1}$ 
 $R_{5}$ 
 $R_{5}$ 
 $R_{1}$ 
 $R_{5}$ 
 $R_{5$ 

in which:

- all of the above entity formula (A), with the exception of the substituent X, is called M6G-N( $R_2$ ) $R_1$ -S-
- $R_1$  represents is a linear or branched  $C_1$ - $C_{10}$  alkyl group, unsubstituted or substituted by at least one substituent, the alkyl chain being optionally interrupted by one or more heteroatoms ehosen from including O, S and or N;
- $R_2$  represents is hydrogen, a linear or branched  $C_1$ - $C_5$  alkyl group or an aryl, heteroaryl or  $(C_1$ - $C_5)$  alkylaryl group, unsubstituted or substituted by a  $C_1$ - $C_4$  alkyl;
- X represents is hydrogen, an M6G-N( $R_2$ ) $R_1$ -S- residue or a polymer linked with the rest of the entity formula (A) by a spacer arm;
- the asymmetric carbons present in the formula (A) can have the R or S configuration, or

as well as its pharmaceutically acceptable salts of formula (A).

- 2. (Currently Amended) Compound according to claim 1, characterized in that
- -R<sub>1</sub> and R<sub>2</sub> are as defined in claim 1;
- -wherein X represents is an M6G-N( $R_2$ ) $R_1$ -S- residue, the two M6G-N( $R_2$ ) $R_1$ -S- residues constituting the compounds of formula (A) in dimer form being identical or different.
  - 3. (Currently Amended) Compound according to claim 1, characterized in that
  - R<sub>1</sub> is as defined in claim-1;
  - -wherein R<sub>2</sub> represents is hydrogen, and
  - X represents is hydrogen.
  - 4. (Currently Amended) Compound according to claim 1 or 2, characterized in that
  - -R<sub>1</sub>-is as defined in claim 1;
  - wherein R<sub>2</sub> represents is hydrogen, and
- X represents is an M6G-N( $R_2$ ) $R_1$ -S- residue in which  $R_1$  and  $R_2$  are as defined above.
- 5. (Currently Amended) Compound according to any one of claims 1 to 4, characterized in that wherein  $R_1$  represents is an alkyl group substituted by one or more substituents including chosen from: a  $C_1$ - $C_5$  alkyl group; an amino group; a  $COOR_3$  group; a  $C_1$ - $C_{20}$  ketone; a  $C_1$ - $C_{20}$  aldehyde; or a  $CONR_3R_4$  group, wherein  $R_3$  and  $R_4$  in the  $COOR_3$  or  $CONR_3R_4$ -groups are each independently representing hydrogen, an optionally substituted  $C_1$ - $C_{20}$  alkyl, an aryl, a heteroaryl or an alkylaryl group; a  $C_1$ - $C_{20}$  ketone and a  $C_1$ - $C_{20}$  aldehyde.
- 6. (Currently Amended) Compound according to claims 1 or 3, wherein characterized in that  $R_1$  represents is -(CH<sub>2</sub>)<sub>2</sub>-,  $R_2$  is hydrogen and X is hydrogen.
- 7. (Currently Amended) Compound according to any one of claims  $1_7$  or 2 or 4, characterized in that wherein  $R_1$  represents is -(CH<sub>2</sub>)<sub>2</sub>-,  $R_2$  is hydrogen and X is an M6G-N(R<sub>2</sub>)R<sub>1</sub>-S- residue in which  $R_1 = -(CH_2)_2$  and  $R_2$  is hydrogen.

- 8. (Currently Amended) Compound according to any one of claims 1, or 2 or 4, characterized in that
- -wherein  $R_1$  represents is a -CH(COOR<sub>3</sub>)-CH<sub>2</sub>- group in which  $R_3$  represents is hydrogen, methyl, ethyl, propyl or butyl,
  - R<sub>2</sub> represents is hydrogen,
- X represents is hydrogen or an M6G-N(R<sub>2</sub>)R<sub>1</sub>-S- residue in which R<sub>1</sub> = -CH(COOR<sub>3</sub>)-CH<sub>2</sub>- in which R<sub>3</sub> is as defined above and R<sub>2</sub> is hydrogen.
- 9. (Currently Amended) Compound according to one of claims 1 or 5, characterized in that wherein
- $R_1$  represents is a -CH(CONR<sub>3</sub>R<sub>4</sub>)-CH<sub>2</sub>- group in which  $R_3$  and  $R_4$  represent are hydrogen, methyl, ethyl, propyl or butyl,
  - R<sub>2</sub> represents is hydrogen,
- X represents is hydrogen or an M6G-N( $R_2$ ) $R_1$ -S- residue in which  $R_1$  = -CH(CONR<sub>3</sub>R<sub>4</sub>)-CH<sub>2</sub>- in which  $R_3$  and  $R_4$  are as defined above and  $R_2$  is hydrogen.
- 10. (Currently Amended) Compound according to claims 1 or 5, characterized in that
- -wherein  $R_1$  represents is a -CH(COOR<sub>3</sub>)-C(CH<sub>3</sub>)<sub>2</sub>- group in which  $R_3$  represents is hydrogen, methyl, ethyl, propyl or butyl,
  - R<sub>2</sub> represents is hydrogen
- X represents is hydrogen or an M6G-N( $R_2$ ) $R_1$ -S- residue in which  $R_1$  = -CH(COOR<sub>3</sub>)-C (CH<sub>3</sub>)<sub>2</sub>- in which  $R_3$  is as defined above and  $R_2$  is hydrogen.
- 11. (Currently Amended) Compound according to claims 1 or 5, characterized in that of formula (A):

$$R_{1}$$
 $R_{2}$ 
 $R_{1}$ 
 $R_{2}$ 
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 $R_{7}$ 
 $R_{1}$ 
 $R_{2}$ 
 $R_{1}$ 
 $R_{2}$ 
 $R_{3}$ 
 $R_{4}$ 
 $R_{5}$ 
 $R_{5}$ 
 $R_{7}$ 
 $R_{7$ 

in which:

- all of formula (A), with the exception of the substituent X, is called M6G- $N(R_2)R_1$ -S-

-wherein  $R_1$  represents is a -CH(COOR<sub>3</sub>)-(CH<sub>2</sub>)<sub>2</sub>-C(O)NHCH(R<sub>5</sub>)-CH<sub>2</sub>- group, in which  $R_3$  represents is hydrogen, methyl, ethyl, propyl or butyl and  $R_5$  represents is -C(O)-NH-CH<sub>2</sub>-COOR<sub>3</sub>,

- R<sub>2</sub> represents is hydrogen
- X represents is hydrogen or an M6G-N(R<sub>2</sub>)R<sub>1</sub>-S- residue in which  $R_1$  = -CH(COOR<sub>3</sub>)-(CH<sub>2</sub>)<sub>2</sub>-C(O)NHCH(R<sub>5</sub>)-CH<sub>2</sub>- in which R<sub>3</sub> and R<sub>5</sub> are as defined above and R<sub>2</sub> represents is hydrogen.
- 12. (Currently Amended) Compound according to claim 1, eharacterized in that
  - -wherein R<sub>1</sub> represents is a -(CH<sub>2</sub>)<sub>2</sub>- group,
  - R<sub>2</sub> represents is hydrogen
- X represents is a polymer linked to the rest of the entity by a spacer arm of formula -S- $(CH_2)_n$ -NH-C(O)- in which n = 0 to 4 and said polymer is a polyethylene glycol of molecular weight (Mw) greater than or equal to 10000.
- 13. (Currently Amended) Method for the preparation of a compound of formula (A) according to any one of claims 1 to 12, characterized in that it comprises the

stages consisting of comprising reacting morphine-6-glucuronide with a compound of formula (III) NHR<sub>2</sub>-R<sub>1</sub>-S-S-R<sub>1</sub>-NHR<sub>2</sub>, in which R<sub>1</sub> and R<sub>2</sub> are as defined <u>above</u> in any one of claims 1 to 11, in the presence of a coupling agent, and reducing the disulphide bridge using a reducing agent if necessary.

- 14. (Currently Amended) Method for the preparation of a compound of formula (A) according to any one of claims 1 to 11, in which X = H, characterized in that it comprises the stages consisting of comprising reacting morphine-6-glucuronide with a compound of formula (IV) NHR<sub>2</sub>-R<sub>1</sub>-SH, in which R<sub>1</sub> and R<sub>2</sub> are as defined above in any one of claims 1 to 12, in the presence of a coupling agent and reducing in situ the oxidation by-products using a reducing agent.
- 15. (Currently Amended) Method according to one of claims 13 or 14, characterized in that wherein the coupling agent includes is chosen from benzotriazol-1-yl-oxy-tris-pyrrolidino-phosphonium hexafluorophosphate (PyBOP), dicyclohexylcarbodiimide (DCC), DCC combined with hydroxybenzotriazole (DCC/HOBT) and or diisopropylcarbodiimide combined with HOBT (DIPCDI/HOBT).
- 16. (Currently Amended) Method according to one of claims 13 or 14, characterized in that wherein the reducing agent is chosen from includes tris(2-carboxyethyl)phosphine, triphenylphosphine, tris(hydroxymethyl)-phosphine and or dithiothreitol.
- 17. (Currently Amended) Pharmaceutical composition, characterized in that it contains including a compound of formula (A) according to any one of claims 1 to 12 and a pharmaceutically acceptable vehicle.
- 18. (Currently Amended) Pharmaceutical composition according to claim 17, eharacterized in that it is which is in a form which that can be administered by parenteral route.

19. (Currently Amended) Pharmaceutical composition according to claim 17, eharacterized in that it is which is in the <u>a</u> form of a preparation which that can be injected by sub-cutaneous, intravenous or intramuscular route.

- 20. (Currently Amended) Pharmaceutical composition according to claim 19, characterized in that it is which is in a form which that can be administered by oral route.
- 21. (Currently Amended) Pharmaceutical composition according to claim 20, characterized in that it has which has a sustained or controlled activity.
- 22. (Currently Amended) A method for treating pain comprising administering Use of a compound according to any one of claims 1 to a human to 12 or a pharmaceutical composition according to any one of claims 17 to 21, for the production of a medicament intended for the treatment of pain.
- 23. (New) A method for treating pain comprising administering a pharmaceutical composition according to claim 17 to a human.